INITIAL STATEMENT OF REASONS AND PUBLIC REPORT DEPARTMENT OF PESTICIDE REGULATION

Title 3. California Code of Regulations Amend Section 6800(b) Pertaining to Groundwater Protection List

This is the Initial Statement of Reasons required by Government Code section 11346.2 and the public report specified in section 6110 of Title 3, California Code of Regulations (3 CCR). Section 6110 meets the requirements of Title 14 CCR section 15252 and Public Resources Code section 21080.5 pertaining to certified state regulatory programs under the California Environmental Quality Act.

SUMMARY OF PROPOSED ACTION/PESTICIDE REGULATORY PROGRAM ACTIVITIES AFFECTED

The Department of Pesticide Regulation (DPR) proposes to amend 3 CCR section 6800(b). The pesticide regulatory program activities that will be affected by the proposal are those pertaining to ground water protection. In summary, the proposed action would update the list of pesticides that have the potential to pollute ground water in California.

SPECIFIC PURPOSE AND FACTUAL BASIS

The Pesticide Contamination Prevention Act (Act) (Statutes of 1985, Chapter 1298, section 1) added sections 13141 through 13152 to the Food and Agricultural Code (FAC). The purpose of the Act is to prevent pesticide pollution of California's ground water aquifers that may be used for drinking water supplies.

FAC section 13145(d) requires DPR to establish, by regulation, the Groundwater Protection List, which consists of chemicals in pesticides that have the potential to pollute ground water. Pesticides on this list are subject to monitoring by DPR to determine whether they have migrated to ground water. Their use must be reported to the Director pursuant to FAC section 12979. In addition, the use of preemergent herbicides on the list is prohibited within 100 feet of an unprotected well.

The Groundwater Protection List, found in section 6800, became effective on January 4, 1989. The chemicals on the Groundwater Protection List are divided into two sublists. The first, section 6800(a), contains chemicals detected in ground water or soil pursuant to FAC section 13149. The second, section 6800(b), contains chemicals that exceed specific numerical values (SNVs) and are applied in a specified manner.

Section 6800(a) consists of a list of seven chemicals--atrazine, simazine, bromacil, diuron, prometon, bentazon, and norflurazon--that have been detected in ground water or soil pursuant to FAC section 13149. FAC section 13150 allows the continued sale and use of these chemicals provided that certain mitigating conditions have been met.

FAC section 13144 requires DPR to establish SNVs for the following physicochemical and environmental fate characteristics: water solubility, soil adsorption coefficient (Koc), hydrolysis, aerobic and anaerobic soil metabolism, and field dissipation. These SNVs are set by comparing pesticides that have been sampled and found in ground water due to agricultural use ("leachers") to pesticides that have been sampled and not found in ground water due to agricultural use ("nonleachers"). If there is a statistical difference between these two groups of pesticides for a given characteristic, such as water solubility, the SNV is set at a level to maximize identification of leachers and minimize misidentification of nonleachers as leachers. If there is no statistical difference between these leachers and nonleachers for a given characteristic, such as in the case of aerobic soil metabolism, the SNV is set so as not to influence the identification of pesticides with the potential to pollute ground water. SNVs are listed in 3 CCR section 6804.

Pesticides that meet the SNV criteria are placed on the so-called "b-2 list" of chemicals [named after FAC section 13144(b)(2)]. FAC section 13144 requires that list of pesticide chemicals to be posted on the DPR Web site annually. Pesticides are considered to "meet the SNV criteria" if any one characteristic exceeds the SNV, or is less than the SNV for soil adsorption coefficient (Koc), in both of the following categories: (1) water solubility or Koc, and (2) hydrolysis, aerobic or anaerobic soil metabolism, or field dissipation. The first category is an indication of a pesticide's mobility, the second an indication of a pesticide's persistence.

FAC section 13145 requires DPR to place "b-2 list" pesticides into section 6800(b) of the Groundwater Protection List provided they are labeled for use under the following conditions:

- (1) the pesticide is intended to be applied to, or injected into, the soil by ground-based application equipment or by chemigation; or
- (2) the label of the pesticide requires or recommends that the application be followed within 72 hours by flood or furrow irrigation.

The amendments to section 6800(b) of the Groundwater Protection List are based on the statutory requirements of FAC section 13145(d). There are four potential reasons why new chemicals may be added to section 6800(b): (1) new active ingredients that meet the criteria are contained in products registered for use, (2) the SNVs are revised based on new physicochemical and environmental fate data submitted, and pesticides that previously did not exceed the SNVs, now do, (3) new label language in a product containing an "old" active ingredient qualifies the pesticide for listing in section 6800(b) for the first time, and (4) "old" active ingredients that should have been added to section 6800(b) previously are now being added.

The Groundwater Protection List part (b) was amended in 1990, 1992, and 1999.

DPR has identified 40 additional pesticidal chemicals that meet the criteria for inclusion into section 6800(b) based on their environmental fate characteristics and label use directions. This proposal would amend section 6800(b) to include these chemicals. The chemicals are the following: azoxystrobin; bensulfuron methyl; bispyribac-sodium; clomazone; 2,4-D, 2-ethylhexyl ester; 2,4-D, diethanolamine salt; 2,4-D, isooctyl ester; 2,4-DP-P, dimethylamine salt (dichlorprop-P, dimethylamine salt); dicamba, diglycolamine salt; dicamba, dimethylamine salt; dicamba, sodium salt; diflufenzopyr, sodium salt; dimethenamid-P; dinotefuran; dithiopyr; endothall, dipotassium salt; endothall, mono (N,N-dimethyl alkylamine) salt; fenoxycarb; fludioxonil; flutolanil; halosulfuron-methyl; imazamox, ammonium salt; imazapic, ammonium salt; imazethapyr, ammonium salt; malathion; mefenoxam; methyl parathion; (S)-metolachlor; penoxsulam; piperonyl butoxide; propanil; siduron; terrazole; thiamethoxam; thiazopyr; thiobencarb; thiophanate methyl; triclopyr, butoxyethyl ester; triclopyr, triethylamine salt; and uniconizole-P.

DPR has also identified one pesticide chemical, acrolein, that no longer meets the criteria for inclusion into section 6800(b) because its re-determined value for anaerobic soil metabolism no longer exceeds the SNV. Thus none of acrolein's persistence values exceeds the corresponding SNVs. This proposal would delete acrolein from section 6800(b).

DPR is also proposing to change the current listing of fosetyl-al technical to fosetyl-al, and include a common synonym for fosetyl-al found on pesticide labels, aluminum tris, in parentheses. The Act requires registrants to submit physicochemical and environmental fate characteristic data only for products registered for agricultural use. Fosetyl-al technical was registered for manufacturing use only. Fosetyl-al is contained in products registered for agricultural use.

CONSULTATION WITH OTHER AGENCIES

DPR consulted with the State Water Resources Control Board (SWRCB) during the development of the proposed regulations as specified in the May 1997 Management Agency Agreement between DPR and the SWRCB. Copies of correspondence with SWRCB are contained in the rulemaking file.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION

DPR has not identified any alternatives to the proposed regulatory action that would lessen any adverse impacts, including impacts on small businesses, and invites the submission of suggested alternatives.

IDENTIFICATION OF ANY SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECT THAT CAN REASONABLY BE EXPECTED TO OCCUR FROM IMPLEMENTING THE PROPOSAL

DPR's review of the proposed action showed that no significant adverse environmental effect to California's air, soil, water, plants, fish, or wildlife can reasonably be expected to occur from implementing the proposal. Therefore, no alternatives or mitigation measures are proposed to lessen any significant adverse effects on the environment.

EFFORTS TO AVOID CONFLICT OR DUPLICATION OF FEDERAL REGULATIONS

The proposed action does not duplicate or conflict with federal regulations because there are no federal regulations contained within the Code of Federal Regulations that address this issue.

DOCUMENTS RELIED UPON

- 1. Fossen, Matthew. 2007. 2007 Status Report. Pesticide Contamination Prevention Act. California Department of Pesticide Regulation. Environmental Monitoring Branch. Publication EH07-04.
- 2. Memorandum from Mark Pepple to John S. Sanders, PhD. 2008. Guidelines for Identifying Pesticides to be added to the Groundwater Protection List Title 3, California Code of Regulations Section 6800(b). Department of Pesticide Regulation. April 15.
- 3. E-mail from Syed Ali to Nan Singhasemanon. 2007. MAA Review Request- Proposed Addition of 36 New Pesticides to DPR's Ground Water Protection [List]. September 26.
- 4. E-mail from Syed Ali to Nan Singhasemanon. 2008. MAA Review Request Additional Pesticides Proposed to be added to DPR's 6800(b) GWP List. May 15
- 5. Quadris (azoxystrobin). Syngenta. Registration Number 100-1098-ZA.
- 6. DuPont Londax (bensulfuron methyl). DuPont. Registration Number 352-506-AA.
- 7. Regiment CA (bispyribac-sodium). Valent USA Corporation. Registration Number 59639-106-AA.
- 8. Cerano 5 MEG (clomazone). Wilbur-Ellis. Registration Number 279-3269-AA-2935.
- 9. Riverdale 2,4-D L.V.4 Ester (2,4-D, 2-ethylhexyl ester). Riverdale Chemical Company. Registration Number 228-139-AA.
- 10. Orchard Master CA (2,4-D, diethanolamine salt). PBI/Gordon Corporation. Registration Number 2217-703-ZB.
- 11. Riverdale 2,4-D L.V. 6 Ester (2,4-D, isooctyl ester). Riverdale Chemical Company. Registration Number 228-95-AA.
- 12. Chaser Ultra 3 Selective Herbicide (2,4-DP-P, dimethylamine salt). Nufarm. Registration Number 228-449-AA.

- 13. Vanquish Herbicide (dicamba, diglycolamine salt). Syngenta. Registration Number 100-884-ZA.
- 14. Rifle Herbicide (dicamba, dimethylamine salt). Platte Chemical Company. Registration Number 34704-861-AA.
- 15. Distinct Herbicide (dicamba, sodium salt). BASF Corporation. Registration Number 7959-150-AA.
- 16. Distinct Herbicide (diflufenzopyr, sodium salt). BASF Corporation. Registration Number 7959-150-AA.
- 17. Outlook Herbicide (dimethenamid-P). BASF. Registration Number 7769-156-AA.
- 18. Dinotefuran 20SG (dinotefuran). Mitsui Chemicals, Inc. Registration Number 33657-17-AA.
- 19. Dimension EC (dithiopyr). Dow AgroSciences. Registration Number 62719-426-ZB.
- 20. Aquathol K (endothall, dipotassium salt). Cerexagri, Inc. Registration Number 4581-204-ZA.
- 21. Hydrothol 191 (endothall, mono [N, N-dimethyl alkylamine] salt). Cerexagri-Nisso LLC. Registration Number 4581-172-AA-82695.
- 22. Award Fire Ant Bait (fenoxycarb). Syngenta. Registration Number 100-722-ZC.
- 23. Cannonball Fungicide (fludioxonil). Syngenta. Registration Number 100-969-ZB.
- 24. Moncut 70 DF (flutolanil). Gowan Company. Registration Number 71711-14-AA-10163.
- 25. Sandea Herbicide (halosulfuron-methyl). Gowan Company. Registration Number 10163-254-AA.
- 26. Raptor (imazamox, ammonium salt). BASF. Registration Number 241-379-AA.
- 27. Roundup Concentrate Extended Control Weed & Grass Killer Plus Weed Preventer (imazapic, ammonium salt). Monsanto Co. Lawn & Garden Products. Registration Number 71995-40-AA.
- 28. Pursuit Herbicide (imazethapyr, ammonium salt). BASF. Registration Number 241-310-ZA.
- 29.Gowan Malathion 8 Flowable (malathion). Gowan Company. Registration Number 10163-21-ZB.
- 30. Ridomil Gold Fungicide (mefenoxam). Syngenta. Registration Number 100-804-ZA.
- 31. Penncap-M (methyl parathion). Cerexagri, Inc. Registration Number 4581-393-ZA.
- 32. Dual II Magnum (S-metolachlor). Syngenta. Registration Number 100-818-ZA.
- 33. Granite GR (penoxsulam). Dow AgroSciences. Registration Number 62719-501-AA.
- 34. Pyronyl Oil Concentrate #525 (piperonyl butoxide). Prentiss Incorporated. Registration Number 655-471-AA.
- 35. Duet DF Rice Herbicide (propanil). Riceco. Registration Number 71085-16-AA.
- 36. Tupersan Herbicide (siduron). Gowan Company. Registration Number 10163-213-AA.
- 37. Terrazole CA (terrazole). Uniroyal Chemical Company, Inc. Registration Number 400-507-AA.

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- 38. Flagship 25WG (thiamethoxam). Syngenta. Registration Number 100-955-AA.
- 39. Visor 2E (thiazopyr). Dow AgroSciences. Registration Number 62719-431-ZA.
- 40. Abolish 8 EC (thiobencarb). Valent USA Corporation. Registration Number 59639-79-ZA.
- 41. Thiophanate Methyl 85 WDG (thiophanate methyl). Farmsaver.Com LLC. Registration Number 72167-10-AA-73220.
- 42. Remedy (triclopyr, butoxyethyl ester). Dow AgroSciences. Registration Number 62719-70-AA.
- 43. Renovate 3 (triclopyr, triethylamine salt). SePRO Corporation. Registration Number 62719-37-AA-67690.
- 44. Sumagic Plant Growth Regulator (uniconizole-P). Valent USA Corporation. Registration Number 59639-37-AA.